

### **REMARKS**

These Remarks are responsive to the Office Action mailed June 1, 2007 ("Office Action"). Applicant respectfully requests reconsideration of the rejections of claims 1-18 for at least the following reasons.

### **STATUS OF THE CLAIMS**

Claims 1-23 are pending in this application. Claims 19-23 have been withdrawn from consideration because of a restriction requirement, and claims 1-18 have been elected. Of the elected claims, claims 1, 7, and 13 are independent. No new claims have been added.

Claims 1, 5, 7, 11-13, and 17 have been amended.

Claims 2-4, 8-10, and 14-16 are canceled without prejudice or disclaimer.

### **CLAIM OBJECTIONS FOR MINOR INFORMALITIES**

The Office Action objects to claims 1-6 because claim 1 contains a period in an improper location. Claim 1 has been amended to correct this typographical error. It is therefore respectfully requested that this objection be withdrawn.

### **REJECTIONS UNDER 35 U.S.C. § 101**

The Office Action rejects claims 7-12 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In making this rejection, the Office Action asserts claims 7-12 recite software *per se* (Office Action, pg. 2). To overcome this rejection, the Office Action suggests amending the preamble of claim 7 to recite "A computer readable medium storing and executing a software application ...." Applicant thanks the Examiner for this suggestion, and in an effort to expedite prosecution, claims 7, 11, and 12 have been amended in accordance with the Examiner's suggestion. It is therefore respectfully requested that this rejection be withdrawn.

**REJECTIONS UNDER 35 U.S.C. § 103**

The Office Action rejects claims 1-18 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. App. No. 2002/0106086 A1 to Kamiya et al. (“Kamiya”) in view of U.S. Pat. No. 5,872,846 to Ichikawa (“Ichikawa”). Claims 2-4, 8-10, and 14-16 are canceled without prejudice or disclaimer. Claims 1, 7, and 13 have been amended to more clearly recite the subject matter being claimed. Applicant respectfully submits that claims 1, 5-7, 11-13, 17, and 18 are allowable for at least the following reasons.

**A. The Cited Combination Fails to Disclose Each and Every Limitation of the Independent Claims**

To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. Claim 1 has been amended to recite *packetizing said collected data into at least two sets of data packets, wherein a first set of data packets comprises encrypted data and a second set of data packets comprises a key for decoding said encrypted data*. This amendment renders the previous rejection moot.

As applied to amended claim 1, Kamiya and Ichikawa—when taken alone or in combination—do not teach or suggest the recitation of *selecting and addressing a second set of data packets for transmission via a satellite delivery system* and/or *transmitting said second set of data packets via said satellite delivery system*. The Office Action acknowledges that “Kamiya et al. fails to explicitly disclose the portions of data being transmitted in a second transmission channel that is a satellite transmission channel.” (Office Action, pg. 4). The Office Action relies on Ichikawa to cure this deficiency. Specifically, the Office Action refers to the Ichikawa teaching of sending key information over a satellite transmission channel (Office Action, pg. 4). The combination of Kamiya and Ichikawa is deficient with respect to claim 1 for at least the following reasons.

Kamiya describes dividing key information into multiple pieces and then delivering those multiple pieces to a given destination via multiple different delivery routes. (*See e.g.*, Kamiya abstract and para. [0007]). Ichikawa discloses transmitting key information over a satellite link. (Ichikawa col. 2, lines 24-26). Importing the Ichikawa teachings into the Kamiya disclosure results in a system where key information is divided into multiple pieces and delivered to a given destination over multiple delivery routes—with one of those delivery routes being a satellite

delivery system. In other words, the combination of Kamiya and Ichikawa simply adds satellite delivery as an additional route to the existing “multiple delivery routes” recited in Kamiya.

Claim 1, *inter alia*, recites ***transmitting said second set of data packets via said satellite delivery system***. The claim further recites that ***a second set of data packets comprises a key for decoding said encrypted data***. Thus, the claim requires sending the key—in its entirety—over the single route of a satellite delivery system. The combination of Kamiya and Ichikawa does not send the key—in its entirety—over the single route of a satellite delivery system. In stark contrast to this requirement, the proposed combination divides the key information and sends it over multiple different routes. Accordingly, the combination does not teach or suggest the claimed recitation of ***selecting and addressing a second set of data packets for transmission via a satellite delivery system***, and/or ***transmitting said second set of data packets via said satellite delivery system***.

Because the cited combination fails to disclose all of the limitations of claim 1, a rejection under 35 U.S.C § 103 is improper and should be withdrawn. Applicant respectfully submits that claim 1 is in condition for allowance.

Independent claims 7 and 13 have been amended in a manner similar to claim 1 and the above arguments apply with equal force to both of these claims. These claims are allowable for similar reasons.

Claims 5, 6, 11, 12, 17, and 18 depend directly or indirectly from independent claims 1, 7, or 13. These claims are allowable as being dependent on an allowable claim.

**B. The Combination of Kamiya and Ichikawa is Improper Because Kamiya’s Use of Multiple Routes to Deliver Key Information is Incompatible With a System That Delivers Key Information Over a Single Route**

A *prima facie* case of obviousness based upon a combination of prior art elements requires a showing of the reasons why a person having ordinary skill in the art would have combined the prior art elements in the manner claimed. *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007).

Kamiya teaches that key information should be delivered in multiple pieces over a plurality of routes. The abstract of Kamiya states that “[M]ultiple pieces of key information are

delivered over routes which ... differ from each other.” This idea is pervasive throughout Kamiya.

Kamiya divides the key information into multiple pieces and delivers the multiple pieces over multiple different routes to prevent unauthorized copying of encrypted content that can only be accessed with the key. (*See e.g.*, Kamiya para. [0007]). Kamiya explains that “[When] the key information is delivered in multiple pieces over a plurality of routes, the unauthorized appropriation of one piece of key information will not compromise the corresponding content data ...” (Kamiya para. [0007]).

Consistent with this idea, Kamiya discloses the following methods for delivering key information to the destination: **(1)** Transmitting the key information over different routes on the internet (*See e.g.* Kamiya paras. [0032], [0163]), **(2)** Transmitting the key information over the internet and on a storage medium (*See e.g.* Kamiya paras. [0046], [0095]), or **(3)** Transmitting the key information on two different storage mediums (*See e.g.* Kamiya paras. [0047], [0160]).

Ichikawa is cited for transmitting key information over a satellite delivery system. Ichikawa does not disclose transmitting the key information over multiple routes. Thus, an adoption of Ichikawa’s teachings by Kamiya would be contrary to the teachings of Kamiya because Kamiya would be forced to transmit the key information over a single route.

1. Kamiya Teaches Away From the Claimed Invention

As to independent claims 1, 7, and 13, combining Kamiya and Ichikawa to arrive at the claimed invention is improper because Kamiya teaches away from the claimed invention. There is no reason to combine references if one of the references teaches away from its combination with another source. *See Tech Air, Inc. v. Denso Mfg. Michigan Inc.*, 192 F.3d 1353 (Fed. Cir. 1999). A reference teaches away when a person of ordinary skill, upon reading the reference, (1) would be discouraged from following the path set out in the reference, or (2) would be led in a direction divergent from the path that was taken by the applicant. *Id.* The Supreme Court recently affirmed this principle by stating that “[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Int’l Co.* at 12.

Here, Kamiya teaches away from a combination with Ichikawa. Kamiya relates to dividing key information into multiple pieces and transmitting those pieces over different routes<sup>1</sup>. Ichikawa discloses transmitting key information over a single route. A person having ordinary skill in the art, upon reading the advantages described in Kamiya of delivering the key via different routes, would be discouraged from following the teachings of any reference that transmits the key as a single entity over a single route.

Kamiya further teaches away from a combination with Ichikawa because a person having ordinary skill in the art, upon reading Kamiya, would be led to design a system where the key information is sent to the destination over multiple routes. Such a system differs substantially from the claimed invention, which requires that a second set of data packets be transmitted over a single route on a satellite delivery system.

Claims 5, 6, 11, 12, 17, and 18 depend directly or indirectly from the independent claims argued above. They are allowable for similar reasons.

## 2. The Proposed Modification to Kamiya Changes Its Principle of Operation

Further regarding independent claims 1, 7, and 13, the proposed modification to Kamiya is improper because it changes Kamiya's principle of operation. If a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810 (CCPA 1959); MPEP § 2143.01(VI).

The Office Action proposes a modification to Kamiya that is contrary to the general theme and principle operation of Kamiya. As noted above, Kamiya breaks up key information into multiple partial keys and then delivers these partial keys to the destination over several different routes. This multi-route delivery system helps prevent unauthorized copying of encrypted data by making it harder to get all of the pieces of key information necessary to decrypt the content data.

To arrive at the invention of claim 1, 7, or 13, Kamiya would have to be modified such that the key information was sent over a single route. The principle operation of Kamiya is to

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<sup>1</sup> Several of these embodiments are described above in Section (B)(1) of this correspondence.

send the key information over multiple routes, not a single route. The proposed modification changes the principle operation of Kamiya by preventing Kamiya from sending the key information over multiple routes. Accordingly, the proposed modification is improper and should be withdrawn.

Claims 5, 6, 11, 12, 17, and 18 depend directly or indirectly from the independent claims argued above. They are allowable for similar reasons.

3. The Proposed Modification to Kamiya Renders Kamiya Inoperable for Its Intended Purpose

Further regarding independent claims 1, 7, and 13, the proposed modification to Kamiya is improper because it renders Kamiya inoperable for its intended purpose. If the teachings of a prior art reference would lead one skilled in the art to make a modification which would render another prior art device inoperable, then such a modification would generally not be obvious to one of ordinary skill in the art. *In re Kramer*, 925 F.2d 1479 (Fed. Cir. 1991) (citing *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1994)); MPEP § 2143.01(V).

The Office Action proposes a modification to Kamiya that would render Kamiya inoperable for its intended purpose. As noted above, Kamiya breaks up key information into multiple partial keys and then delivers these partial keys to the destination over several different routes. The intended purpose of this multi-route delivery system is to prevent unauthorized copying of encrypted data by making it harder for an unauthorized party to get all of the pieces of key information necessary to decrypt the content data.

To arrive at the invention of claim 1, Kamiya would have to be modified such that the key information is sent over a single, satellite delivery route instead of being sent over multiple routes. The intended purpose of Kamiya is sending the key information over multiple routes to avoid unauthorized decryption. The proposed modification renders Kamiya inoperable because it forces Kamiya to send the key information over a single route and thus thwarts Kamiya's intended purpose of using multiple routes to prevent unauthorized decryption. Consequently, the proposed modification is improper and should be withdrawn.

Claims 5, 6, 11, 12, 17, and 18 depend directly or indirectly from the independent claims argued above. They are allowable for similar reasons.

**CONCLUSION**

Applicant respectfully submits that the application is in condition for allowance and respectfully request a notice of allowance for the pending claims. Should the Examiner determine that any further action is necessary to place this application in condition for allowance, the Examiner is kindly requested and encouraged to telephone Applicant's undersigned representative at the number listed below.

It is believed that no fees are due in connection with this response. However, if any fees are determined to be due, the Commissioner is hereby authorized to charge these fees to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,  
HUNTON & WILLIAMS LLP

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Hunton & Williams LLP  
Intellectual Property Department  
1900 K Street, N.W. Suite 1200  
Washington, DC 20006-1109  
(202) 955-1500 (telephone)  
(202) 778-2201 (facsimile)

By: 

Yisun Song  
Registration No. 44,487